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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,034	10/28/2005	Jonathan Burr	JUSL-119 (62800-028)	4687
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EXAMINER				
LONG, PONYA M				
ART UNIT		PAPER NUMBER		
3689				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/526,034

Applicant(s)

BURR ET AL.

Examiner

FONYA LONG

Art Unit

3689

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 81-88 and 90-105 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 81-88 and 90-105 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB08)
Paper No(s)/Mail Date 04/09/2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This communication is a Final Office Action in response to communications received June 30, 2008. Claim 89 has been canceled. Claims 81, 90, 91, and 98 have been amended. Claims 81-105 are currently pending and have been considered below.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 81-85, 90, and 98-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lapidot (6,341,255) in view of Krull et al. (6,545,637).

As per Claims 81 and 98, Lapidot discloses a method and system for providing traffic information comprising route results, the method and system comprising:

a route segment processor for performing, for each segment of a route between an origin point and a destination point, a time-dependent journey planning calculation based on a time during which a vehicle is predicted to be traveling through the segment, to produce a segment result (Claim 1, discloses calculating segments of a recommended route of travel using a starting point, an intermediate position, and a destination point based on a predetermined time interval for travel (i.e. time during which a vehicle is predicted to be traveling) and a measured vehicle velocity for the vehicle);

a route result formation means for forming a plurality of route results being formed based on a plurality of the segment results (Col. 6, Lines 27-34, discloses all driver's routes being selected on current and anticipated average traffic speeds on candidate roads and road segments);

a rapid access means, in a digital storage means, for storing the plurality of route results (Claim 1, discloses storing route information in a route selecting computer); and

a user request process for accessing the rapid access means for use in responding to a user request for traffic information for a journey between the origin point and the destination point (Claim 31, via accumulating up-to-date traffic information for a route (between the origin point and the destination point)).

However, Lapidot fails to explicitly disclose a data received for receiving real time data; disseminating traffic information to vehicles on route; and verifying the real time data by correlating the real time data with data stored.

Krull et al. discloses a system and method for a navigational device with the concept of a data receiver for receiving real time data relating to real time vehicle location from a plurality of vehicle bound probes and other sensory data to ensure and maintain accuracy of segment results (Col. 3, Lines 38-52, via the positioning (i.e. vehicle location) and velocity data of a vehicle can be updated in real time on a continuous basis to obtain the current location of the vehicle); recording vehicle speeds with specific time of day such that the speeds are divided into a plurality of separate time of day intervals (Col. 9, Lines 41-53, discloses recording travel habit data which includes data relating to the thoroughfare, the time of day, and the historical travel

speed of the device on the particular thoroughfare); disseminating means for disseminating said traffic information to vehicles on route via a radio data system, a mobile telephone or computer (Col. 4, Line 34-Col. 5, Line 3, discloses navigational information being disseminated to vehicles on route via a PDA, a cellular telephone, or a vehicle-mounted unit); and verifying the real time data by correlating the real time data with data stored (Abstract, Col. 8, Lines 21-50, discloses verifying the current position of a vehicle (i.e. real time data) by determining the current position of the vehicle travel along a given route, if the vehicle has deviated from the designated route, the system calculates a new route based on the new current location).

Therefore, from the teaching of Krull et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus and method for providing route guidance to vehicles of Lapidot to include receiving real time data; disseminating traffic information to vehicles on route; and verifying the real time data by correlating the real time data with data stored as taught by Krull et al. in order to provide a user with more understandable, accurate, and timely route calculation capabilities.

As per Claims 82 and 99, Lapidot discloses determining a segment duration for traversing the segment based on a predicted vehicle speed for the segment at the time during which the vehicle is predicted to be traveling through the segment (Col. 6, Lines 27-65, discloses performing a time-dependent calculation for a route (Claim 1) which consists of a plurality of segments based on current and anticipated average traffic speeds (i.e. vehicle speeds) on candidate roads and roads segments).

As per Claims 83 and 100, Lapidot discloses summing a plurality of segment durations to produce an overall route duration (Fig. 6 discloses providing an estimated arrival time (i.e. overall route duration) based on a given route (Claim 1) which consists of a plurality of segments).

As per Claims 84 and 101, Lapidot discloses determining a predicted vehicle speed for traversing the segment based on the time during which the vehicle is predicted to be traveling through the segment (Col. 6, Lines 27-49, discloses determining a current and anticipated (i.e. predicted) average traffic speeds for the segments included in the route).

As per Claims 85 and 102, Lapidot discloses averaging a plurality of predicted vehicle speeds, each corresponding to a segment; to produce an overall predicted route speed (Col. 5, Lines 40-47, discloses averaging traffic velocity (i.e. vehicle speed) in each road segment).

As per Claim 90, Lapidot discloses the plurality of vehicle-bound probes including at least one mobile telephone (Col. 6, Lines 1-7, discloses vehicle location information (such as GPS information) being derived by a mobile communication device such as mobile telephones).

3. Claims 86, 91, 95, 96, and 103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lapidot (6,341,255) in view of Krull et al. (6,545,637) and in further view of Sroub et al. (US 2003/0135304).

As per Claims 86 and 103, the Lapidot and Krull et al. combination discloses the claimed invention as applied to Claims 81 and 98, above. However, the combination

fails to explicitly disclose the time-dependent journey planning calculation being based on a time of day and a day of the week.

Sroub et al. discloses a system for computing a trip route with the concept of the time-dependent journey planning calculation being based on a time of day and a day of the week during which the vehicle is predicted to be traveling through the segment ([0039] via determining routing information based on the time of day and the day of the week).

Therefore, from the teaching of Sroub et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Lapidot and Krull et al. combination to include the time-dependent journey planning calculation being based on a time of day and a day of the week as taught by Sroub et al. in order to provide an accurate duration time in reference to the planned route.

As per Claim 91, Lapidot et al. discloses a matrix of routes relative to at least a plurality of time of day divisions (Fig. 11k, via Time column) and a plurality of routes (Fig. 11k, via Segment ID column), based on the matrix of vehicle speeds (Fig. 11k, via Speed column). However, the Lapidot and Krull et al. combination fails to explicitly disclose recommending the most economic routes.

Sroub et al. discloses a system for computing a trip route with the concept of recommending the most economic routes (Claim 4, discloses producing one or more candidate routes that minimize one or more costs associated with traveling a candidate route based, at least in part, on data stored in the experience based travel database

([0039] which contains a plurality of time of day, a plurality of routes, and vehicle speeds (i.e. fast driver or slow driver)).

Therefore, from the teaching of Sroub et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Lapidot and Krull et al. combination to include recommending the most economic routes as taught by Sroub et al. in order to provide a means for saving the user money when traveling.

As per Claim 95, the Lapidot and Krull et al. combination discloses the claimed invention as applied to Claim 91, above. However, the combination fails to explicitly disclose identifying real time traffic congestion; and determining alternative routes.

Sroub et al. discloses a system for computing a trip route with the concept of identifying, in real time, an area of traffic congestion between the origin point and the destination point ([0055] via receiving real time traffic data in reference to the selected route); and determining an alternative, second matrix of recommended most economic routes based on the identified area of traffic congestion ([0056] discloses determining new routes based on modeling that integrates information stored in the historical database with the real time data (i.e. real time traffic data)).

Therefore, from the teaching of Sroub et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Lapidot and Krull et al. combination to include identifying real time traffic congestions; and determining alternative routes as taught by Sroub et al. in order to save time and money for the user when traveling by avoiding traffic congested areas.

As per Claim 96, the Lapidot and Krull et al. combination discloses the claimed invention as applied to Claim 95, above. However, the combination fails to explicitly disclose the traffic congestion being identified using a database of traffic patterns.

Sroub et al. discloses a system for computing a trip route with the concept of the traffic congestion being identified using a database of traffic patterns ([0056] via modeling that integrates information stored in the historical database with the real time data (i.e. real time traffic data)).

Therefore, from the teaching of Sroub et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Lapidot and Krull et al. combination to include the traffic congestion being identified using a database of traffic patterns as taught by Sroub et al. in order to save time and money for the user when traveling by avoiding traffic congested areas.

4. Claims 87 and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lapidot (6,341,255) in view of Krull et al. (6,545,637), and in further view of Sroub et al. (US 2003/0135304), Ran (6,317,686), and Examiner's Official Notice.

The Lapidot, Krull et al., and Sroub et al. combination discloses the claimed invention as applied to Claims 86 and 103, above. However, the combination fails to explicitly disclose the day of the week being selected from a group comprising Bank Holiday, Day before Bank Holiday, Day after Bank Holiday, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday.

Ran discloses a method for predicting travel times with the concept of the day of the week being selected from a group comprising a Bank Holiday (Col. 5, Lines 31-43,

via determining travel time based on holidays such as Memorial Day or the Fourth of July).

Therefore, from the teaching of Ran, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Lapidot, Krull et al., and Sroub et al. combination to include the day of the week being selected from a group comprising a Bank Holiday as taught by Ran in order to provide an accurate travel time based on various traffic patterns in relation to holidays.

The examiner takes Official Notice that it is old and well known in the art that the days of a week are Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday, wherein a day before a Bank Holiday and a Day after a Bank Holiday would be considered either a Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, or Saturday.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Lapidot, Krull et al., Sroub et al., and Ran combination to include the days of a week as being Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday in order to provide a travel time based on various traffic patterns such as weekend traffic patterns versus weekday traffic patterns.

5. Claims 88 and 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lapidot (6,341,255) in view of Krull et al. (6,545,637) and in further view of Braegas (5,465,088).

The Lapidot and Krull et al. combination discloses the claimed invention as applied to Claims 81 and 98, above. However, the combination fails to explicitly disclose a look-up table.

Braegas discloses a method for providing a route to a drive with the concept of a look-up table (Col. 5, Lines 46-53, discloses a look-up table in relation to a starting point and a destination point).

Therefore, from the teaching of Braegas, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Lapidot and Krull et al. combination to include a look-up table as taught by Braegas in order to the user with easy access to stored data in relation to traffic information.

6. Claim 92 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lapidot (6,341,255) in view of Krull et al. (6,545,637) and in further view of Sroub et al. (US 2003/0135304) and *Grubbs Test for Outliers* (October 4, 2000).

Lapidot discloses analyzing vehicle speeds related to unforecastable events (Col. 6, Lines 50-65, discloses determining anticipated average speeds based on time-dependent characteristics such as accidents). However, the Lapidot, Krull et al., and Sroub et al. combination fails to explicitly disclose removing outlier vehicle speeds and vehicle speeds related to unforecastable events from the matrix of vehicle speeds using statistical analysis.

Grubbs Test for Outliers discloses a method for detecting outliers in a data set with the concept of removing outlier vehicle speeds and vehicle speeds related to unforecastable events from the matrix of vehicle speeds using statistical analysis

(discloses outliers being expunged from a dataset so that no outliers exist in the dataset).

Therefore, from the teaching of *Grubbs Test for Outliers*, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Lapidot, Krull et al., and Sroub et al. combination to include removing outlier vehicle speeds and vehicle speeds related to unforecastable events from the matrix of vehicle speeds using statistical analysis as taught by *Grubbs Test for Outliers* in order to develop an accurate approximation of travel time for a given route.

7. Claims 93 and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lapidot (6,341,255) in view of Krull et al. (6,545,637) and in further view of Sroub et al. (US 2003/0135304) and Ran (6,317,686).

As per Claim 93, Lapidot discloses a plurality of route matrix elements (Claim 1, discloses a plurality of route segments), wherein each route matrix element corresponds to a pairing of an origin point with a destination point (Claim 1, discloses each segment corresponding with a current location (i.e. origin point) and a destination location). However, the Lapidot, Krull et al., and Sroub et al. combination fails to explicitly disclose a route string, a shortest distance corresponding to the route string, a time corresponding to the route string, and a cost corresponding to the route string.

Ran discloses a method for providing travel time with the concept of a route string (Fig. 10A, discloses a route string (i.e., starting and destination location), a shortest distance corresponding to the route string (Fig. 10B, discloses shortest distance for the route string via entering desired route selection criteria as shortest

distance), a time corresponding to the route string (Fig. 10B, discloses the estimated travel time for a route string), and a cost corresponding to the route string (Fig. 9, discloses the total cost for a route string).

Therefore, from the teaching of Ran, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Lapidot, Krull et al., and Sroub et al. combination to include a route string, a shortest distance corresponding to the route string, a time corresponding to the route string, and a cost corresponding to the route string as taught by Ran in order to provide the user with information relating to the time and cost for a given route.

As per Claim 94, The Lapidot and Krull et al. combination discloses the claimed invention as applied to Claim 93, above. However, the combination fails to explicitly disclose a plurality of possible vehicle types.

Sroub et al. discloses a system for computing a trip route with the concept of a plurality of possible vehicle types ([0039] discloses entering vehicle types (i.e., cars, trucks, buses) as profile information).

Therefore, from the teaching of Sroub et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Lapidot and Krull et al. combination to include a plurality of possible vehicle types as taught by Sroub et al. in order to aid in determining the cost for traveling a selected route based on the vehicle type.

8. Claim 97 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lapidot (6,341,255) in view of Krull et al. (6,545,637) and in further view of Sroub et al. (US 2003/0135304) and Lapidot et al. (6,490,519).

As per Claim 97, the Lapidot, Krull et al., and Sroub et al. combination discloses the claimed invention as applied to Claim 95, above. However, the combination fails to explicitly disclose determining whether real time vehicle location data corresponds to a predetermined level of variance of vehicle speeds.

Lapidot et al. discloses a method for traffic monitoring and route guidance with the concept of determining whether real time vehicle location data from a plurality of vehicle-bound probes correspond to a predetermined level of variance from historic real time vehicle speeds (Col. 5, Lines 31-35, discloses reporting information to the traveler only if the travel information (i.e. vehicle speed or travel time) deviates, in accordance, with a predetermined deviation criteria (i.e. predetermined level of variance of vehicle speeds) from a known travel time value. Col. 10, Lines 30-34, discloses the deviation criterion includes deeming as a travel time deviation, an increase in travel time over a route (i.e. a change in vehicle speed) which affects the relative attractiveness of the route relative to at least one alternative route.).

Therefore, from the teaching of Lapidot et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Lapidot, Krull et al., and Sroub et al. combination to include determining whether real time vehicle location data corresponds to a predetermined level of variance of vehicle speeds as

taught by Lapidot et al. in order to determine whether a selected route should be updated in order to provide the most economical route for the user.

Response to Arguments

9. Applicant's arguments filed June 30, 2008 have been fully considered but they are not persuasive.

As per Claims 81, 86-97, 98, and 103-105, Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments have been addressed in the rejection stated above.

As per Claims 86-97 and 103-105, Applicant argues that Lapidot, Sroub et al., Braegus, Ran, and Grubbs Test for Outliers fails to disclose validating traffic data based on consideration of historic data stored in a matrix and other sensory data. Examiner asserts that the features upon which applicant relies (i.e., validating traffic data based on data stored in a matrix and other sensory data) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FONYA LONG whose telephone number is (571)270-5096. The examiner can normally be reached on Mon-Thur 7:30am-6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janice Mooneyham can be reached on (571) 272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. L./
Examiner, Art Unit 3689

/Janice A. Mooneyham/
Supervisory Patent Examiner, Art Unit 3689